

REMARKS/ARGUMENTS

Claim 61 has been amended so that the amphiphilic copolymer forms a micelle on contact with water. Support for this amendment exists throughout the present specification, including the examples.

Claims 53 and 83 have been canceled.

New claims 87 and 88 have been added. Support for these new claims exists throughout the present specification, including the examples and page 13, lines 12-17.

Claims 41-52, 54-66, 68-82 and 84-88 are currently pending, although claims 41-52, 54-60, 81, 82 and 86 have been withdrawn. Applicant currently intends to seek rejoinder of withdrawn claims, where appropriate, upon indication of allowable subject matter.

The Office Action rejected claims 61-65, 70, 72, 73 and 78-80 under 35 U.S.C. § 102 as anticipated by PCT patent application no. WO 01/12718 (“Seo”), claim 84 under 35 U.S.C. § 103 as obvious over Seo, claims 66, 68, 69, 71 and 75-77 under 35 U.S.C. § 103 as obvious over Seo in view of U.S. patent 6,994,846 (“L’Alloret”), claim 74 under 35 U.S.C. § 103 as obvious over Seo in view of U.S. patent application publication no. 2003/0027864 (“Guiramand”), and claim 85 under 35 U.S.C. § 103 as obvious over Seo in view of U.S. patent 5,246,693 (“Grollier”). In view of the following comments, Applicant respectfully requests reconsideration and withdrawal of these rejections.

The present invention relates to compositions comprising an aqueous phase in which a lipophilic compound is dissolved in the required amphiphilic polymer – that is, no need exists for first solubilizing the lipophilic compound in a solvent as well as a polymer, and then forming micelles by contacting the mixture with water. Rather, the present invention relates to combining the lipophilic compound and the required compound to solubilize the lipophilic compound in the required polymer (regardless of whether solvent is also present), and then contacting the lipophilic compound/required polymer mixture with water to form micelles. Stated another way, the present invention relates to new ways to solubilize a lipophilic using the unique polymers of the present invention. None of the applied art teaches or suggests this invention.

Regarding the rejection under 35 U.S.C. § 102, Seo discloses polymers comprising caprolactone. Claim 61 has been amended by deleting caprolactone. Accordingly, claim 61 (and dependent claims) cannot be anticipated by Seo. Stated another way, Seo does not teach or suggest the required polymers, so it cannot anticipate the claimed invention.

With respect to claim 62, Seo discloses dissolving a polymer in a solvent (PEG, optionally including other organic solvents), and dissolving a drug in the polymer/PEG mixture. Thus, Seo teaches dissolving a drug in a solvent-containing mixture, so it cannot anticipate claim 62.

Similarly, with respect to new claim 87, Seo does not teach combining a lipophilic compound with at least one block amphiphilic copolymer, wherein the block copolymer is present in an amount effective to dissolve the at least one lipophilic compound. Rather, Seo teaches adding substantial amounts of solvent (PEG, organic solvent) in which the drug and polymer can be solubilized. Accordingly, Seo cannot anticipate claim 87.

In view of the above, Applicant respectfully requests reconsideration and withdrawal of the rejection under 35 U.S.C. § 102.

Regarding the rejections under 35 U.S.C. § 103, as noted above, Seo does not teach or suggest the claimed polymers, and Seo does not teach or suggest combining a lipophilic compound with at least one block amphiphilic copolymer, wherein the block copolymer is present in an amount effective to dissolve the at least one lipophilic compound.

The secondary references, L'Alloret, Guiramand, and Grollier, cannot compensate for these fatal deficiencies.

L'Alloret requires the presence of an ionic water-soluble hydrophilic polymer block, and states that synergistic gelation results from combining such an ionic hydrophilic block with other blocks (see, col. 4, line 2). In stark contrast, Seo discloses polymers having nonionic hydrophilic blocks (polyalkylene glycol) and a hydrophobic block selected from specified materials (see, page 6) which form could form a micelle. Thus, whereas L'Alloret requires the presence of an ionic hydrophilic block, Seo discloses polymers having nonionic hydrophilic blocks. Moreover, whereas L'Alloret states that synergistic gellation results from combining an ionic block with another block, Seo requires the presence of specific hydrophobic and hydrophilic components to form micelles. Given the specific teachings of each reference which, if followed, yield very different results (synergistic gelation vs. micelle), no motivation would have existed to combine different blocks from the two references with the expectation that a suitable product would result. Stated another way, given the requirements for different hydrophilic blocks in the two references, given the specificity with which Seo identifies acceptable hydrophobic blocks and given the vastly different products of the two references, nothing would have led one of ordinary skill in the art to substitute blocks from one reference in the other reference or to believe that such a substitution would have produced an acceptable product. Thus, the combination of L'Alloret and Seo cannot form the basis for a proper obviousness rejection.

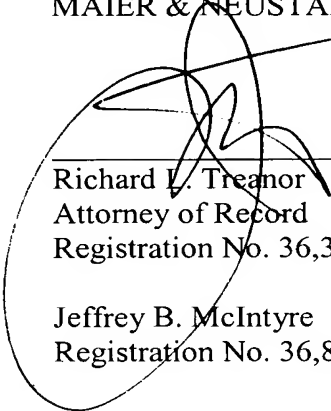
Guiramand, cited only for its disclosure of salicylic acid compounds, and Grollier, cited only for its disclosure related to specific oils, cannot compensate for Seo's fatal deficiencies either.

In view of the above, Applicant respectfully requests reconsideration and withdrawal of the rejections under 35 U.S.C. § 103.

Applicant believes that the present application is in condition for allowance. Prompt and favorable consideration is earnestly solicited.

Respectfully submitted,

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